Case study_2013_06

Earthquake reinforcement of masonry with S&P CFK-Laminates and G-Sheets

Project:	Credit Suisse AG, Glarus Division Office, Switzerland (CH)
Year:	2013
Solution:	As part of a total renovation regarding earthquake resistance, this protected monument has been reinforced to meet norms. The statics calculations showed that various masonry walls need to be reinforced over several storeys. Vertically prestressed S&P CFK-Laminates transfer dynamic earthquake loads into the foundations. Diagonal CFK laminates transfer horizontal loads in the new slabs through a “gusset plate”. The G-Sheet AR 50/50, installed in advance, reinforces the old stone masonry and holds it together. The epoxy resin S&P Recisem is used to ensure vapour diffusion.
Materials:	approx. 340 metres S&P CFK-Laminates and 200 m² S&P G-Sheet AR 50/50
Timeframe:	approx. 4 months over several stages
Images:	*a) The building: a protected historical monument* *b) Prestressing the vertical S&P CFK laminates* *c) View of the completed reinforced wall slab*

a)

b)

c)